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ABSTRACT

Monetary incentives are not the only variables that attract and hold good teachers. Long-lasting organizational change can only be achieved by manipulating organizational values such as authority structures, reward systems, technology, and environmental relations. To affect both teachers and students, educational reform must include teachers' workplace conditions. Since 1982, a University of Tennessee (Knoxville) research team has been collaborating with U.S. school systems on improving educational workplace quality. This study identifies the workplace conditions affecting the quality of worklife of teachers in 17 demographically diverse schools in the northeastern, southeastern, and midwestern United States and one school system in Nova Scotia. Approximately 1,000 teachers were surveyed and 250 interviewed. Although all the identified variables were seen as important to the teachers in participating schools, most were not being sufficiently satisfied. The pattern of unsatisfied variables differed with each school, underscoring the definition of the individual school as the workplace. Leadership at the school level was found to be a critical factor in teacher work satisfaction. The Quality of Educational Workplace process was found to provide school personnel with specific data based on teacher-identified priorities upon which school improvement plans could be formulated. Included are 61 references and 4 tables. (MLH)

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SCHOOL BASED RESEARCH TO IMPROVE THE QUALITY OF THE EDUCATIONAL WORKPLACE

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ABSTRACT

In this descriptive study, the workplace conditions that affect the quality of worklife of teachers in seventeen schools with diverse demographic characteristics in the northeastern, southeastern, and midwestern United States and one school system in Nova Scotia were identified and assessed by surveying approximately 1,000 teachers and interviewing approximately 250. Although all of the identified variables were seen as important to the teachers in the participating schools, most were not being satisfied to their perceived level of importance. The pattern of unsatisfied variables differed with each school, underscoring the definition of the individual school unit as the workplace. Leadership at the school level was found to be a critical factor in teacher work satisfaction. The QEW (Quality of the Educational Workplace) process was found to provide school personnel with specific data based on teacher identified priorities upon which school improvement plans could be formulated.

INTRODUCTION

Since 1982 a team of researchers from the University of Tennessee at Knoxville has been working collaboratively with school systems throughout the United States on improving the quality of the educational workplace. The project was initiated as a response to national concerns regarding the quality of schools and of the educational workforce that focused on accountability, merit pay, career ladders, and other pay for performance incentives. This project was designed to address non-monetary incentives that could have an impact upon improving the quality of the educational workplace for teachers and, as a result, the quality of learning for students.

Beginning with the report to the nation by the National Commission on Excellence in Education in 1983 which stated that our "nation is at risk" because of the quality of its schools, educators have been barraged by a steady stream of treatises and reforms. Confidence in schools has continued to decrease. Public demands for change, improved performance, and accountability encouraged reformers to focus on the knowledge, attitudes, and behaviors of the individual teacher or of teachers in general. Educators, conducting their own research on the quality of the educational workforce, were finding that the profession was neither attracting nor holding the most capable teachers. Merit pay, career ladders, and monetary incentives were encouraged to attract and reward good teachers. Numerous plans were implemented across the nation. Studies have shown that the increased time and workload demands, the stress, and the divisiveness of competitive reward structures has been more detrimental to teachers' job satisfaction than the

financial rewards have been positive (Bellon, Bellon, Blank, Brian, and Kershaw, 1989; Johns, 1988). Furthermore, there is little evidence that such plans have attracted teachers to the profession nor provided the desired holding power. Many of the programs have been shown to add to teachers' frustrations with the profession.

The researchers believe that monetary incentives are not the only variables that attract and hold good teachers in the profession. As Katz (1981) and Kahn (1981) argue, long lasting organizational change can only be achieved through the manipulation of organizational variables such as authority structures, reward systems, technology, and environmental relations. Drawing from the successes of organizational redesigns in business and industry that have attended to those variables, it was concluded that educational reform, to have an impact upon both teachers and students, must go beyond monetary factors to include the workplace conditions of teachers.

The quality of the educational workplace (QEW) process was designed to focus on the individual school site. It was developed to enhance the knowledge and understanding of local school officials responsible for management of reform in their schools and to provide a means for school personnel to improve the quality of the workplace at the local level. Although initiated during the "first wave" of reform, this process is more consistent with the "second wave" which is turning from state level mandates to school system, school, or classroom reforms. It is at this level that educators are realizing that improvement efforts have the greatest potential impact.

The process was based upon an examination of the processes used to improve the quality of worklife in business and industry (QWL) and the literature on motivation, work satisfaction, teacher attrition, and teacher stress and burnout in education. This review of the literature indicated a need to identify and improve factors in schools that had a potential impact on teacher work satisfaction. By identifying factors of importance to teachers, assessing their levels of satisfaction, and involving administrators and teachers at the building level in working together to address high priority needs, the University of Tennessee at Knoxville researchers began the development of a process to improve the quality of the educational workplace. The goal of the project was to improve the educational workplace, making it more rewarding for teachers and more productive for learners. Grounded in the belief that students will reap the ultimate rewards when the workplace is improved in ways valued by teachers, this ongoing research is a series of case studies of the conditions that can make a difference in teachers' well being on the job.

The process has undergone many refinements throughout its development. Findings from each phase of the research, an ongoing review of the literature, and input from the participants have been used to revise, expand, and refine the process. The population has also been expanded. During the current developmental phase of the process, the entire focus has been expanded to

include administrators, support personnel, students and parents. The quality of the educational workplace (QEW) process is now becoming one aspect of a total quality of school life (QSL) process.

PURPOSE

The overall purpose of the initial phases of this research was to determine the work satisfiers that are important to teachers in selected school units and to assess their levels of satisfaction. A more specific purpose was to develop, implement, and evaluate a QEW improvement plan that focused on the important workplace variables in each school unit. The research was designed to answer the following research questions:

1. What are the workplace conditions that are important to the quality of worklife of the teachers in the project schools?
2. What is the current status of selected workplace conditions in the project schools?
3. What are the workplace conditions that need improvement in the project schools?
4. What workplace conditions are important to teachers across the project schools?
5. How well are important workplace conditions being satisfied across the project schools?

In answering the above questions and helping the school unit to develop an improvement plan, the university collaborative research team has four operational goals. First, they carry out the required research and present the research findings. Second, they help school personnel identify and implement appropriate improvements. Third, they work with school personnel, at the school's request, in determining processes that could be used successfully to plan and implement QEW improvements . Finally, they are in the process of establishing a network through which a group of schools striving to achieve excellence could work together.

ASSUMPTIONS

There are several assumptions upon which the current phase of the research is based. They

are:

1. Workplace conditions of teachers influence the degree of successful teaching and learning that occurs;
2. The workplace conditions that affect the quality of worklife of teachers can be identified and assessed;
3. The unique characteristics of a school unit influence the level of importance of workplace conditions.
4. There are workplace conditions that are generic to educational organizations.
5. The collaborative research effort of the university faculty and public school personnel can effect a positive change in the workplace conditions of teachers.

THEORETICAL PERSPECTIVE

The Changing Workforce

The "traditional three part life model of education, career, and retirement" has become an obsolete concept in the American culture (Crane, 1980, p. 99). Changing societal trends, an increasingly sophisticated workforce, technological advances, and increased opportunities for women and minorities in the workplace have had a major impact on workers' views about their jobs or careers (Bell, 1971; Peters and Waterman, 1982; Goodmeasure, Inc.,1985). People are demanding more personal satisfaction and opportunities for learning from their jobs. They are seeking social responsibility and opportunities to fulfill higher order needs through their occupations and workplaces (Yankelovich, 1981). When not satisfied with their working conditions or the opportunities available to fulfill their needs, today's workers are more likely to change jobs or to merely accommodate them by altering or reducing goals, withdrawing, resigning, or adopting aggressive behaviors while fulfilling higher order needs outside the workplace (Hinrichs, 1974; Seashore, 1975; Raelin, 1984) . According to Portigal (1976), the state of the labor market and an individual's alternatives combine with levels of job satisfaction and dissatisfaction in determining an individual's likelihood of leaving a job.

In the American culture second and third careers have become commonplace. Movement within and across professions is also more frequent. Professional headhunters have, within the last decade, focused on relocating CEO's, attorneys, physicians, and other professionals. Educators, particularly those teachers with skills and abilities sought by business and industry, have been active participants in the pursuit of new careers. Numerous studies have indicated that many of the teachers currently holding teaching jobs are not satisfied with their occupational choice (Duke, 1984; Wangberg, Metzger, and Levitor, 1982; Fiske, 1982; Gallup Poll, 1985). Other studies indicate that the teaching profession loses a disproportionate number of its most talented recruits early in their careers (Vance and Schlechty, 1982). This was supported by Lieberman who concluded that it is the strong teachers rather than the weak ones who are leaving the profession (Green, 1986). If these conclusions are accurate, the teaching profession may continue to lose a large percentage of its most talented members unless the educational workplace becomes more attractive and satisfying.

As another parallel to business and industry, the educational workplace has undergone many of the same organizational changes that have affected the private sector. As the size and complexity of educational institutions has grown and the demands placed upon them have increased, problems have arisen that adversely affect both the teachers and the organizations themselves. Since the early 1980's, educators have had to respond to a growing number of mandates from federal, state, and local levels. As public institutions, finances for supporting programs have been sparse, often forcing teachers and administrators to add even more responsibilities to their already heavy workloads. The lack of time to do a job well, less than satisfactory working conditions, insufficient resources, communication problems, and diverse client needs are major areas of educational concern that differ little from the private sector organizations.

While education has been subjected to the same rapid societal changes and technological advances as the private sector, the structure of its organization and management has been altered little to adapt to their influences. This may be due, in part, to the fact that teaching has traditionally been viewed as "women's work" and, as such, as less important than other professions (Lortie, 1975). It may also be the result of decades of oversupply in a marketplace where supply and demand often dictate change. This is no longer the case, however. Women and minorities, according to current labor statistics, are no longer a "captive labor market" (Duke, 1984, p.21). Career options have become readily accessible for this former pool of readily available recruits (Wangberg, Metzger, and Levitor, 1982).

With fewer talented teachers entering the profession and increasing numbers leaving for

other careers, shortages of qualified teachers are the natural byproduct. Shortages of teachers in the areas of mathematics and science have been documented for several years while demands for increased curricular offerings in those areas are the focus of most reform proposals. The teacher shortage is not limited to the fields of mathematics and science, however. A Rand Commission report cited a 1984 survey of teacher placement offices which identified shortages in computer programming, data processing, bilingual education, English, and special education (Darling-Hammond, 1984). Furthermore, the National Center for Educational Statistics reported in 1981 that fewer than two thirds of the newly hired teachers in English, social studies, and other secondary subjects were certified or eligible for certification in the subjects they were assigned to teach (Darling-Hammond, 1984). In addition, the same report suggested that the supply of new teacher graduates would fill only about 80% of the national demand by 1988. In the south, one study (Galambos, 1980) indicated that public school instructional staff would decline during the 1980's and into the 1990's and that this continuing decline would result in a shortage of approximately 8,700 teachers annually during the early 1990's. This is more than a regional trend. According to the Carnegie Forum on Education and the Economy, "(a)fter years of teacher surplus, in 1985 jobs and job seekers were roughly in balance. For at least the next 10 years, however, there will be more jobs than applicants" (National Education Association, 1987).

Work Satisfaction in Business and Industry

The Quality of Worklife (QWL) model in business and industry provided the theoretical basis for addressing the worklife of teachers. QWL has been defined as "a process by which an organization attempts to unlock the creative potential of its people by involving them in decisions affecting their work lives" (Guest, 1979, pp.76-77). The QWL process focuses on both extrinsic and intrinsic factors. The extrinsic factors include: adequate and fair compensation (Koch, 1982; Lippitt and Rumley, 1977; Guest, 1979); safe and healthy working conditions (Walton, 1975); due process and job security (Walton, 1975; Herrick and Maccoby, 1975); and adequate benefits (Koch, 1982). Intrinsic factors include: the challenge and variety of the job (Koch, 1982); opportunities for continued learning and development (Walton, 1975; Koch, 1982); recognition and the social relevance of work life (Koch, 1982; Walton, 1975); the meaning of organizational and interpersonal relationships (Lippitt and Rumley, 1977; Guest, 1979); and opportunities for career growth (Lippitt and Rumley, 1977).

QWL approaches have been widely applied in business and industry. Pratzner (1984) cites

a 1982 New York Stock Exchange survey that reported that about 13 million workers were involved in QWL or similar programs. As a process rather than a specific program, QWL interventions provide the means for involving employees at every level of an organization in solving problems and in discovering improved ways of doing things which, in the end, result in fulfilling their own work satisfaction needs (Sweeney, 1981). Among the organizations utilizing QWL processes, a wide range of strategies from quality circles, problem-solving task forces, and employee involvement approaches to semi-autonomous work teams and major work redesign have evolved (Cohen-Rosenthal, 1983; Pratzner, 1984; Goodmeasure, 1985).

Work Satisfaction in Education

Research on QWL has not extended to the educational workplace. In an effort to provide an application of the QWL process to education, a thorough review of current literature regarding teacher workplace variables and related factors concerning satisfaction and job performance was conducted. Three major categories appeared to represent these variables/factors: 1) job satisfaction/dissatisfaction; 2) performance quality; and 3) work involvement. Job satisfaction is defined as the degree to which a person perceives he/she is satisfied with intrinsic and extrinsic factors of the job. Performance quality is the degree to which a person carries out his/her teaching responsibilities as affected directly or indirectly by personal, organizational and outside influences. Work involvement is the degree to which a person identifies psychologically with his job performance and, in turn, how that performance affects his/her total self image. The interaction of these factors affects teachers' decisions to remain in the teaching profession as a career or to make an alternative career choice. The assumption is that a teacher whose needs are satisfied to a level perceived as adequate is motivated to become involved in the job and that involvement positively affects performance quality. Thus, it becomes important to determine those factors which teachers perceive as being satisfying, rewarding, and motivating.

In the process of identifying sources of satisfaction/dissatisfaction for the teacher in his/her work environment, it is important to note that factors which contribute to job satisfaction and those that contribute to dissatisfaction may not be categorized in the same set or be placed on a conceptual continuum. According to Hoth (1979), satisfied faculty scored significantly higher than dissatisfied faculty on motivational factors. In a study (Openshaw, 1980) focusing on job satisfaction and the application of Herzberg's (1959) Motivation-Hygiene Theory, it was found that both motivation and hygiene factors were primarily related to feelings of job satisfaction rather

than job dissatisfaction. According to Morris, there is a positive relationship between career satisfaction and teacher health and turnover (Morris, 1982).

Several studies (McGowan, 1980; Warner, 1981; Thierback, 1980; Knoop, 1980; Bacharach, Bauer, and Shedd, 1986) reported finding that teachers felt a need for greater control in the decision making process. Significant relationships were found between satisfaction with work and participation in decision making. Career satisfaction for teachers seemed to be influenced significantly by a teacher's skills and abilities, certification to teach the subject assigned, and decentralized scheduling (Lowther, 1982; Koch, 1982; Haywood, 1980). Major causes of dissatisfaction with the teacher's work environment by teachers who had either requested to be transferred or had resigned were: 1) perceptions of their job assignments, 2) selected working conditions, and 3) school leadership (Bradford, 1980; Maddux, Henderson, and Darby,1980).

Rewards that are intrinsic in nature provide the highest level of satisfaction for teachers (Bredeson and Fruth, 1983). Making a difference in students' lives and helping students learn have been cited as the most critical motivators for teachers (Ashton, Webb, and Doda, 1983; Bellon, Bellon, Blank, Brian, and Kershaw, 1989). Feelings of personal accomplishment and self satisfaction with one's own performance also serve to keep most teachers motivated within a low paying profession (Bacharach, Bauer, and Shedd, 1986; Schwab, Jackson, and Schuler, 1986). Teachers' skills and abilities, acknowledged through self-reflection or evaluation, are also meaningfully related to teachers' decisions to remain in the teaching profession as a career and to their perceptions of career satisfaction (Hall, 1978). Furthermore, recognition of teachers' skills and abilities as well as successes is a valued motivator (Sederberg and Clark, 1987). Teachers who do not experience such successes leave teaching (Rosenholtz, 1984). Respect for the important role teachers play is another important motivator that, unfortunately, is generally undersatisfied. Ninety-nine percent of one group of survey respondents said that providing more respect for teachers in today's society would encourage good teachers to remain in their profession (Lobasco, Newman, and Sole, 1988).

Extrinsic rewards such as salary, benefits, and other types of compensation are important factors on a teacher's list of needs. However, findings from the research clearly suggest that a teacher's salary is not a primary motivator. Merit pay and career ladders are two prime examples. Often highly attractive politically, these two monetary programs fail to address what Bacharach calls the "most critical obstacle" in improving the educational system: the characteristics of the learning workplace (Bacharach, Bauer, and Shedd, 1986). Although an adequate and equitable salary schedule are important, monetary rewards are not a major reason for remaining in the profession (Sederberg and Clark, 1987). According to a study of 600 teachers' views of

Tennessee's Career Ladder Program, monetary rewards was the most important outcome of the program, but was not included as a primary career satisfier. The teachers cited working with students and having an impact on students' lives as their primary career satisfiers. Furthermore, the teachers said that the Career Ladder Program had had little or no effect upon their primary career satisfiers (Bellon, Bellon, Blank, Brian, and Kershaw, 1989). However, other studies have shown low starting salaries and salary schedules that do not show comparability in preparation and responsibility to professions in business and industry to be obstacles in attracting and retaining talented young teachers (NEA, 1983; Rosenholtz, 1984). Other extrinsic factors such as lack of resources, administrative actions or inactions and inadequate working conditions are also tied to teacher work dissatisfaction (McLaughlin, Pfeifer, Swanson-Owens, and Lee, 1986). Excessive workload and lack of public support (Ashton, Webb, and Doda, 1982) and large class sizes, non-teaching duties, and few opportunities for professional growth (Darling-Hammond, 1984) are additional extrinsic factors that affect teachers' perceptions about their work.

Combining findings from the QWL research in business and industry with those from the literature on teacher work satisfaction and motivation led to the identification of factors that are critical to the perceptions of teachers regarding the quality of their educational workplace. The workplace conditions that were identified have a direct impact on teachers within the school setting. There are other factors outside the control of the school organization that are also relevant to understanding the teachers' beliefs and attitudes brought to the workplace. These outside factors, however, cannot be easily addressed by the organization. Focusing on improving the workplace factors of importance to teachers, administrators, and support personnel allows the organization the opportunity to make valued changes. The assessment of factors, particularly in terms of satisfaction, varies in nature from school to school. Through identification of the factors in unique combinations for each school, a process can be developed for planned change relevant to and individualized for each individual school.

METHODS AND PROCEDURES

This is a descriptive case study using questionnaires and interviews as sources of data. It has been conducted in developmental phases with revisions made to the instruments and/or to the method of data analysis between each phase. During Phase I, an intensive review of the literature on work satisfaction, motivation, efficacy, attrition, and stress and burnout in education and on the

quality of worklife (QWL) in business and industry was conducted to identify workplace factors that could have a potential impact on the quality of teachers' worklives. A questionnaire and interview were developed, pilot tested, and administered. Phase II involved a "fine graining" of the workplace factors and the instrumentation based on a continuing review of the literature and findings from the first phase. Additional workplace variables were added during Phase III. In addition, a factor analysis of the participants' responses, input from the participants, and the ongoing review of the literature indicated a need to expand the population served by the process. As a result, the QEW instrumentation was adapted for use with administrators and support staff (secretaries, janitors, cafeteria personnel, bus drivers). The administrator and support staff questionnaire was piloted and field tested. Phase IV, which is currently underway, began with refinements on the QEW questionnaire and interview schedule for teachers and professional staff based upon the continuing evaluation of the process and instrumentation. At this point, a decision was made to broaden the process to address all those affected by the quality of the local school. Available literature on parent and student perceptions of school climate was reviewed. Instrumentation was developed and pilot tested and is currently being field tested to assess student and parent perceptions of the quality of school life. The quality of the educational workplace process (QEW) has become a key component in a total quality of school life process (QSL).

Subjects

The total population studied during the various phases is comprised of teachers and support staff from seventeen schools in six states in the southeastern, midwestern, and northeastern United States and one school system in Nova Scotia. During Phases I and II, a total of 797 teachers were surveyed and 240 were interviewed. During Phase III, the teacher questionnaire and the questionnaire adapted for administrators and support staff was piloted and field tested with the North Side Victoria School System in the province of Nova Scotia. In the field test sample of 500, approximately half were teachers and the remainder were administrators and support staff (secretaries, custodians, bus drivers, and cafeteria workers). Several Phase IV schools have been identified and will be actively involved in the process by April, 1989.

The schools were selected for their diverse demographic characteristics. Included were schools with a population range between 150 and 2,200. There were eight elementary, four middle and five high schools. The schools represented rural, small town, suburban, urban, and inner city geographic locations. In one case, five of the schools, one high school, one middle

school, and three elementary schools, were all within one school district. In Nova Scotia, the teachers, administrators, and support staff from the entire district participated.

Student enrollment patterns also varied. One school was heavily bilingual, one was composed largely of minority students, three were predominantly white, and the remainder were a mixture of ethnic composition. Socioeconomic levels ranged from low-average to very affluent, as reflected in annual per pupil expenditures ranging from $1,700 to $5,000.

In relation to the collective bargaining process, there was wide variation in teacher participation. One school had a very strong bargaining team representing every classification of employee, while others had average or minimal participation.

Design and Instrumentation

The questionnaire and the semi-structured interview were chosen as the methods of data collection. The combination of survey tools provided different perspectives of the workplace conditions and allowed the researchers to present a more in-depth portrayal of the workplace. The interviews were also used to verify the questionnaire responses, to cross check the themes on the assessments, and to investigate personal beliefs, attitudes, and needs.

During Phase I conducted during the 1984-85 school year, the research investigated the workplace conditions of teachers that had been identified from the review of the literature. These included:

1. recognition - acknowledgment of one's contributions (e.g., feedback from administrators, colleagues, students, community;
2. inclusion - interacting with others to achieve a satisfactory sense of belonging (e.g., total faculty work groups, or individual colleagues);
3. resources - materials, curricula, equipment, and financial support to aid teachers in their workplace;
4. work control - opportunities to control, expand, and enrich one's work, i.e., involvement in decisions affecting all aspects of one's workplace;
5. formal reward system - contractual compensation for one's work (e.g., salaries, benefits, and bonuses);
6. achievement - a sense of accomplishment through the fulfillment of a desired goal and/or meaningful tasks (e.g., excellent teaching, student learning);

7. work environment - the conditions in which one's job is performed (e.g., space, physical surroundings, schedule);

8. support systems - individuals and groups who support teachers in their workplace (e.g., administration, teacher aides, organizations, and colleagues);

9. work load - nature of job assignment (e.g., number of student contacts, preparation[s], non-instructional tasks or duties);

10. growth - opportunities for personal development (renewal) of knowledge, skills, attitudes, and talents.

The questionnaire and interview instrumentation were designed to determine the current status of the workplace conditions, their level of importance, and those targeted as areas in need of improvement for each school. After the teachers' perceptions had been gathered and portrayed for the participating schools, improvement plans were developed and implemented by the local school personnel with assistance from the university team when requested.

During Phase II, conducted from the fall of 1985 to the spring of 1987, the instruments were revised to address additional conditions identified during Phase I. Status (the status of teaching as perceived by students, colleagues, parents, community members, the public, or the teachers themselves) and leadership were included in the list of workplace conditions. For each of the workplace conditions, additional variables were identified that gave a more detailed portrayal of teachers' perceptions. The revised instruments were piloted and administered. The importance and satisfaction levels of the workplace variables were identified for each participating school, committees were established to work with the findings that were presented to the schools, and the university personnel assisted the school committees, upon request, throughout the improvement plan process.

During Phase III (1987-88), the university researchers conducted a factor analysis on the total sample of participants' responses to all of the variables on the questionnaire. The purpose of the factor analysis was to determine whether or not the variables added during Phase II actually did represent the factor categories on the instrument. As a result of the factor analysis, it was determined that the variables did represent the factors as related to importance. The satisfaction variables, however, did not factor into the same categories as the importance variables. It was determined that this was due to the significant variation of responses among the schools as to satisfaction of specific components of the educational workplace. The factor analysis supported the single school site as the unit of analysis and provided data upon which to make further refinements on the instrumentation. The teacher questionnaire was then adapted for administrators

and support personnel. Factor categories were identified and the instrumentation was designed to assess levels of satisfaction and priorities as to importance. The categories included working conditions, resources, work load, support systems, work control, interaction, work enrichment, sense of achievement, recognition, growth and renewal, status, and leadership. The instruments were piloted and field tested.

Phase IV has focused on making the refinements to the teacher QEW questionnaire suggested by the results of the factor analysis and on developing instrumentation to assess the perceptions of students and parents regarding the quality of school life (QSL). The addition of the student and parent components was expedited in order to assist the Tennessee's Commissioner of Education in addressing one of the state's goals for all future reform efforts: to improve the quality of school life. The instrumentation has been developed, pilot tested, and is currently ready for field testing in four schools. This field testing will be conducted in April, 1989. It will also be field tested with several other school systems throughout the state of Tennessee during the 1989-90 school year.

Data Collection, Analysis, and Reporting

In Phases I and II, district leaders were contacted by the Research team to determine their willingness to participate in the study. All of the school units responded positively. A contact person in each school was identified. The contact person scheduled the data collection, submitted a teacher roster to be used by the university team members in drawing a stratified random sample of teachers to be interviewed, and scheduled the interviews. In Phase I, all of the teachers completed the questionnaire and at least fifteen percent of the large school faculties and approximately fifty percent of the small faculties were interviewed. In Phase II, all of the teachers were surveyed using the revised questionnaire and approximately thirty percent of the large school faculties and fifty percent of the small school faculties were interviewed.

During both Phase I and Phase II of the study, questionnaires were distributed to teachers at faculty meetings. The researchers explained the purpose of the study to the teachers, the teachers' role in the study, and how the data would be used. The questionnaires were distributed at these meetings, procedures were explained, and the completed questionnaires were collected. The interviews were conducted within two days following the faculty meeting.

Responses to the workplace conditions on the Phase I questionnaire were tabulated according to importance (rank ordering the four most significant in affecting one's quality of

worklife), current status (outstanding, good, average, unsatisfactory), and areas in need of improvement (rank ordering of four most critical areas for improving the school). The number and percentage of respondents were tabulated for each workplace condition by school. Table 1 provides an example of the format in which the data were reported.

In analyzing the Phase II questionnaire, the responses were tabulated by frequency and percentage of response for each of the fifty variables. In order to present the findings in a meaningful and usable format for the participating faculties, the frequency data were condensed to form bipolar representations (i.e., very important + important, of little importance + unimportant, very good + good, and poor + very poor). The bipolar data were then used to calculate the amount of importance/satisfaction discrepancy that is perceived relative to each variable subtopic. Using the discrepancy figures, the 50 workplace variables were then portrayed by school in the following categories determined by rank order: areas of high satisfaction, areas of satisfaction, areas of moderate concern, and areas of concern.

While the university personnel were analyzing the data, the school administrators began identifying a school level team, in most cases by voluntary selection, to work with the findings in establishing improvement goals. The University of Tennessee team members presented the findings to the administrators and the teachers simultaneously to prevent any perceptions of "hidden agendas" by the teaching staff. After the data were presented to the school personnel, the university team became a support system for the school team as they worked with the data.

Phase III data was collected, analyzed, and presented in a slightly different manner. First, the questionnaires were administered to the participants at a two day conference. The questionnaires were hand scored during the conference and overall patterns of response were reported to the participants. After the conference, a more in depth analysis was conducted and reported to the school system. The school system is in the process of developing a multi-year plan to address the improvement areas that they have identified as priorities.

RESULTS

One outcome of Phase I was that the workplace factors were found to be context dependent rather than generic across all participating schools. The unique characteristics of each individual school made the school the most significant unit of analysis. Trying to compare the teachers' perceptions across all schools amalgamated the patterns found in the data. Also, the factor

categories on the questionnaire used alone were found to be limiting the possible responses. For each factor category there were several examples included as a definition. By focusing on the factor category alone, an opportunity was lost to gather more in-depth perceptions.

The changes made in the instrumentation improved the data collected in Phase II. The variables included on the revised questionnaire provided much more information than did the original factor categories. The response format allowed teachers to respond to all of the factors and variables on a continuum, rather than to rank order designated numbers of factors. This format established a value for each factor or variable independent of the other factors or variables. The interview format was altered very little except for the addition of questions focusing on the two new factors: status and leadership.

As was found in Phase I, the patterns of response from teachers during Phase II indicated that a given school unit reflected the school's individual characteristics and the particular needs of its teachers. Looking at the data across the schools again obscured what was significant for the individual schools. Therefore, the individual school remained the unit of analysis with comparisons made only when applicable to a large percentage of the total sample of schools.

The interview data did, in all cases, support the general patterns identified in the questionnaire responses. The interview data also provided more detailed examples and perceptions regarding the questionnaire responses. For example, in one school "adequacy of the building facilities" (factor: working conditions) was very important to the majority of the teachers and very poorly satisfied. It was through the interview data that one critical area of concern was identified. The building was lacking adequate ventilation and/or air conditioning in one wing and the entire faculty used the QEW process as a means to remedy a situation they felt was unbearable for their peers and students. Since the patterns identified in the interviews differed little from those found in the questionnaire responses, the explanation of patterns in this report will be limited to those from the questionnaire data.

Research Questions

Question 1. What are the workplace conditions that are important to the quality of worklife of the teachers in the project schools?

In responding to the Phase I questionnaire, teachers were asked to rank order the four

workplace conditions that made the greatest difference in judging their overall quality of worklife as a teacher. This process identified the workplace conditions that were most important to the teachers' work satisfaction. Table 1 provides an example of the response patterns for one of the six schools participating in Phase I. Achievement was cited as the most important factor at four of the six schools, second at the fifth school, and sixth in the sixth school. The remaining factors varied in order of importance from school to school. The number of factors ranked as most important by more than 40% of the teachers varied from three at one school to six at another.

The Phase II and III questionnaires for teachers required that they rate each of the fifty workplace variables in terms of importance. They were rated on a four point scale as either very important, important, of little importance, or unimportant. Table 2 portrays the patterns of responses by starring the variables when the percentage of respondents fell below the 85% (*) and 70% (**) levels in terms of importance. The patterns are presented by school and by variable number and factor category. Of the 50 variables, each school reported that from 36 to 47 were important or very important to more than 85% of the faculty. The actual variables that were considered important or very important to fewer than 85% of the faculty varied among the schools. One school, School D, cited only three variables (6%) and another school, School H, cited 14 (28%) as important to fewer than 85% of the teachers. The remainder fell within these extremes. Nine of the eleven schools cited at least 80% of the variables as important or very important to more than 85% of the teachers. Only one factor category, growth, included a high percentage (66%) of the variables as important to fewer than 85% of the teachers for all or nearly all the school units.

Question 2. What is the current status of selected workplace conditions in the project schools?

On the Phase I questionnaire, teachers were asked to assess the current status (satisfaction level) of each of the ten workplace factors by rating each as either outstanding, good, average, or unsatisfactory. Table 1 illustrates the responses of teachers at one of the six schools. The factors ranked as outstanding or good by more than 40% of the teachers ranged in frequency from four at one school to all ten at another. Achievement and resources were the only two factors that fell within this range at all six schools. The unsatisfactory factors ranged in number from zero to three. Two schools cited no factors as unsatisfactory. Recognition was cited as unsatisfactory by three of the schools and work load by two schools.

As was the format in identifying the importance level of the workplace variables during

Phases II and III, teachers also rated the fifty variables in terms of satisfaction. The responses were made on the following four point scale: very good, good, poor, very poor. Table 3 provides an illustration of the response patterns from this assessment. On Table 3, those variables are starred that were perceived as good or very good by fewer than 60% of the teachers (*) or by fewer than 30% of the teachers (**). As this table indicates, there was greater variation in number, frequency of response, and variables identified with regard to satisfaction among schools than there was in terms of importance. School A cited only 7 (14%) variables within this range with only one falling below the 30% satisfaction range. In contrast, three schools identified over fifty percent of the variables as below the 60% satisfaction level. The remaining schools ranged from 10 (20%) to 20 (40%) of the variables below the 60% satisfaction level. In addition, some factor categories fell within this range on almost all the variables while others were not included for any of the variables. The factor category of status, variable numbers 47-50, is an example of this pattern. Three schools (School A, School C, and School E) all reported satisfaction percentages above the 60% level. Four schools reported all the variables between the 30% and 60% levels and the remainder were mixed.

Question 3. What are the workplace conditions that need improvement in the project schools?

On the Phase I questionnaire, the respondents were asked to identify in rank order the four workplace conditions that should be targeted for improvement in their respective schools. The conditions cited for improvement for one of the schools are illustrated by Table 1. Among the conditions targeted by more than 40% of the teachers, none was consistently included at each of the six schools. Work control was the only workplace condition included by five of the six schools. The remainder ranged from two to five at the various schools.

In order to identify areas in need of improvement from the Phase II and III teacher questionnaire responses, the frequency data were condensed to form bipolar representations which were then utilized to calculate the amount of importance/satisfaction discrepancy (importance minus satisfaction) that was perceived relative to each workplace variable. The discrepancy figures were then used to rank order the variables into four basic groups: areas of high satisfaction; areas of satisfaction; areas of moderate concern; and areas of concern. Table 4 illustrates those variables included in the area of high satisfaction and the area of concern for each of the eleven schools. It is important to recognize that many of the variables included in the area of high satisfaction are among those considered less important than other variables. Therefore, they are, in many cases, being

satisfied to a greater level than they are deemed important. This was the case with the variable "opportunities for contributions to professional organizations" (factor: sense of achievement). Likewise, some of the variables that were listed as poorly satisfied on Table 3 are not listed as an area of concern due to their low rating in terms of importance. This was the case with the variable "commendations from parents and/or community" (factor: recognition). The variables that fall within the area of concern are those that are significantly important to the teachers at a given school and that are also significantly unsatisfied. The specific variables and the number of variables differed from school to school which underscored the definition of the workplace as the school unit. In two schools, there were more variables in the area of high satisfaction than in the area of concern. In three schools, the number of variables in each area were the same or nearly the same. In the remaining six schools, the number of variables in the area of concern was significantly higher than the number in the area of high satisfaction.

Question 4. What workplace conditions are important to teachers across the project schools?

Based upon the Phase I questionnaire data, several of the same workplace conditions were among those identified by the teachers as most important to their career satisfaction. They were not, however, consistently ranked by each school. Achievement was the only condition ranked as highly important by more than 40% of the teachers at all six schools. The differences in rank ordering were considerable among the schools. These differences underscored the fact that the unique characteristics of a school, or the school workplace, had the greatest impact upon the teachers' responses even in terms of importance.

The responses regarding the importance of the workplace variables on the Phase II and Phase III questionnaires indicated that all of the workplace factors and nearly all of the variables comprising the factor categories are important to a majority (85%) of the teachers across the schools. Only two variables, "opportunity to offer professional contributions to professional organizations, journals, or projects" (factor: sense of achievement) and "opportunities for advancement within the school system" (factor: growth), were rated as important or very important to fewer than 85% of the teachers at each of the eleven schools. Furthermore, in fifty percent or more of the schools, these two variables were important or very important to fewer than 70% of the teachers. Another variable, "opportunities for leadership roles within the school system" (factor: job enrichment), was also rated as important or very important to fewer than 85% of the faculty by 10 of the 11 school faculties. A third variable, "opportunities for promotion"

(factor: formal rewards system), fell within this range for 8 of the 11 schools. The remainder of the response patterns varied both in number and in variable cited by the school unit.

Question 5. How well are important workplace conditions being satisfied across the project schools?

As was found regarding the importance of the workplace conditions during Phase I, many of the same conditions were ranked as good or outstanding in terms of satisfaction at each of the schools. Achievement and resources were the only two conditions cited within this range by more than 40% of the teachers at each school. Other highly satisfied conditions varied greatly on a school by school basis. Although not cited by every participating school, work load and formal rewards system were the only two workplace conditions cited as unsatisfactory by more than 30% of the faculty at any given school. Each was cited in this category at two schools. Three schools included no workplace conditions within this range. It was concluded, therefore, that satisfaction with the workplace factors was more dependent upon school context than was the importance of the factors.

This conclusion was confirmed by the responses regarding satisfaction with the workplace variables on the Phase II and Phase III teacher questionnaires. Only two variables, "opportunities for advancement within the system" (factor: growth) and "availability of monetary incentives" (factor: formal rewards system), fell below the 60% satisfaction level at all eleven schools. Two others, "opportunities for promotion" (factor: formal rewards system) and "opportunities to participate in school-wide decisions" (factor: work control), ranked within this range for 10 of the 11 school units. Seven additional variables (14%) fell below the 60% satisfaction level in more than 50% of the schools. The remainder of variables varied among the schools. The intensity of the rating of the variables (60% and 30% satisfaction levels) also differed among the various schools.

DISCUSSION

This study of the quality of the educational workplace is not complete. It was designed as an ongoing collaborative research effort between university and public school personnel to improve

the educational workplace to make it more rewarding for teachers and, as a result, more productive for learners. What was learned from Phase I provided the basis for changes made during Phase II. The findings from Phase II guided revisions in instrumentation, implementation, and population for Phase III. Phase III also provided insights that were not specifically addressed by the questions posed during the initial phases of the research. These insights pertain to the views of administrators and support staff regarding their perceptions of the quality of the educational workplace.

The results the first three phases have led to a major change for Phase IV which is just beginning. Three major findings from the initial phases of the research have altered the focus of Phase IV. In every school, the teachers identified all of the factors as important or very important to the quality of their worklives. It was decided that what was needed in the future is to determine which of the factors are most important at a given school. Second, the levels of satisfaction varied significantly from school to school based on local context. It was impossible, therefore, to look across the schools at perceptions of satisfaction. This underscored the definition of the local school as the workplace and confirmed the case study analysis design. Therefore, the research questions focusing on the population across the schools have been deleted from Phase IV. Third, the inclusion of administrators and school personnel added significantly to the total assessment of the quality of the educational workplace. The value of this additional perspective, along with the mandate from the state of Tennessee to address the quality of school life, has broadened the focus of the collaborative research efforts to include all faculty members, support personnel, students and parents. Specifically, the Phase IV research design has been revised to answer the following questions:

1. What are the workplace conditions that are most important to the quality of worklife of the faculty members (teachers, administrators, and support personnel) in the project schools?

2. What is the current status of selected workplace conditions in the project schools?

3. What are the workplace conditions that need improvement in the project schools?

4. What school factors are important to students and parents served by the project schools?

5. How well do students and parents perceive important school factors as being satisfied by the project schools?

Based on the data from the first three phases, there are a number of significant findings to report. First, the workplace factors identified through the review of the literature were supported by the teachers' responses as important to their satisfaction in the educational workplace. Furthermore, these factors are important to nearly all of the teachers in all of the participating schools. They are not, however, being satisfied to their perceived levels of importance at any of the schools. The variations in responses among the schools indicates that the unique characteristics of a school have the most significant impact upon teacher perceptions. One of the workplace factors studied, sense of achievement, was the most important and most satisfied of the workplace factors for the teachers across the population. In general, formal rewards system, workload, and status were among the most important and least satisfied factors for teachers across the population.

From the experiences involved in gathering the data and working with the school faculties involved in the research, additional insights have been gained. The process provided an objective assessment of teacher perceptions and identified priorities for improvement. Furthermore, it provided the data upon which the school personnel could formulate specific school improvement plans and the vehicle to be used in opening lines of communication. The most important finding in this area, however, is the importance of the role of school leaders in improving the quality of the educational workplace. The schools that made major improvements were committed to using the research data and to involving staff members in the development and implementation of the improvement plans. Not all schools were as successful as the University personnel had hoped they would be. This is another area under review for Phase IV.

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Table 1

THE NUMBER AND PERCENTAGE OF RESPONDENTS TO THE PHASE I QUESTIONNAIRE FOR ONE OF THE SIX PARTICIPATING SCHOOLS

SAMPLE SIZE: 110		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ACHIEVEMENT	[illegible]	[illegible]	[illegible]	GROWTH
	O/G	33(30%)	48(44%)	86(78%)	35(32%)	52(48%)	83(77%)	57(52%)	39(35%)	51(47%)	46(43%)
[illegible] STAINS	A	50(46%)	48(44%)	22(20%)	44(40%)	48(44%)	21(19%)	43(39%)	55(50%)	44(40%)	51(48%)
	U	26(24%)	13(12%)	2(2%)	31(28%)	9(8%)	4(4%)	10(9%)	16(15%)	14(13%)	10(9.)
	1st 2nd	29(26%)	15(14%)	10(9%)	29(26%)	21(19%)	42(38%)	18(16%)	17(16%)	22(20%)	9(8%)
[illegible]	3rd 4th	25(23%)	24(22%)	17(16%)	21(19%)	25(23%)	17(16%)	24(22%)	13(12%)	25(23%)	23(21%)
	TOTAL	54(49%)	39(36%)	27(25%)	50(45%)	46(42%)	59(54%)	42(38%)	30(28%)	47(43%)	32(29%)
	1st 2nd	31(28%)	25(23%)	8(7%)	30(27%)	25(23%)	11(10%)	20(18%)	25(23%)	21(19%)	9(8%)
[illegible]	3rd 4th	30(27%)	17(16%)	10(9%)	26(24%)	29(26%)	12(11%)	22(20%)	19(17%)	21(19%)	21(19%)
	TOTAL	61(55%)	42(38%)	18(16%)	56(51%)	54(49%)	23(21%)	42(38%)	44(40%)	42(38%)	30(27%)

Table 2

IMPORTANCE OF QUALITY EDUCATIONAL WORKPLACE FACTORS AND VARIABLES BY SCHOOL

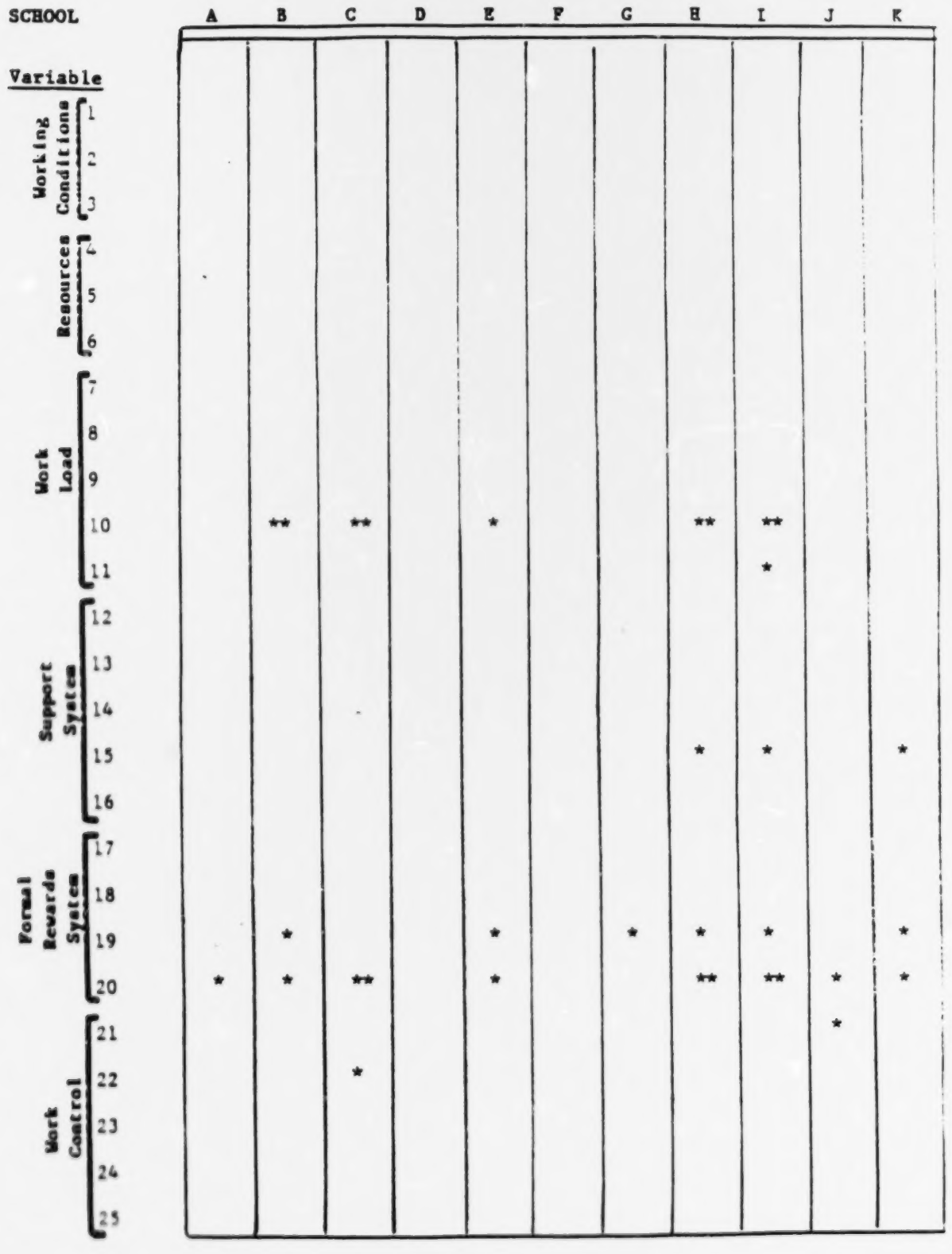

Table 2 Continued

Variable		SCHOOL A	B	C	D	E	F	G	H	I	J	K
Inclusion	26		*		*				*	*	*	*
	27											
	28										*	
	29											
	30											
	31											
Job Enrichment	32											
	33											
	34		**		*				*			
	35		*	*	*				*	*	*	
Sense of Achievement	36											
	37											
	38	*	**	**	**	*	*	*	**	*	**	*
	39											
Recognition	40											
	41											
	42								*			
	43	*	*		*			*	*	*		
Growth	44											
	45	*	**	*	*		*	**	**	*	*	*
	46	*	**	*	**	*	*	**	**	**	**	*
Status	47								*			
	48											
	49								*			
	50											
Total		5	10	7	7	5	3	5	14	11	8	7

*=Any workplace variable that is important or very important to fewer than 85% of the teachers at a given school

**=Any workplace variable that is important or very important to fewer than 70% of the teachers at a given school

Table 3

SATISFACTION OF QUALITY EDUCATIONAL WORKPLACE FACTORS AND VARIABLES BY SCHOOL

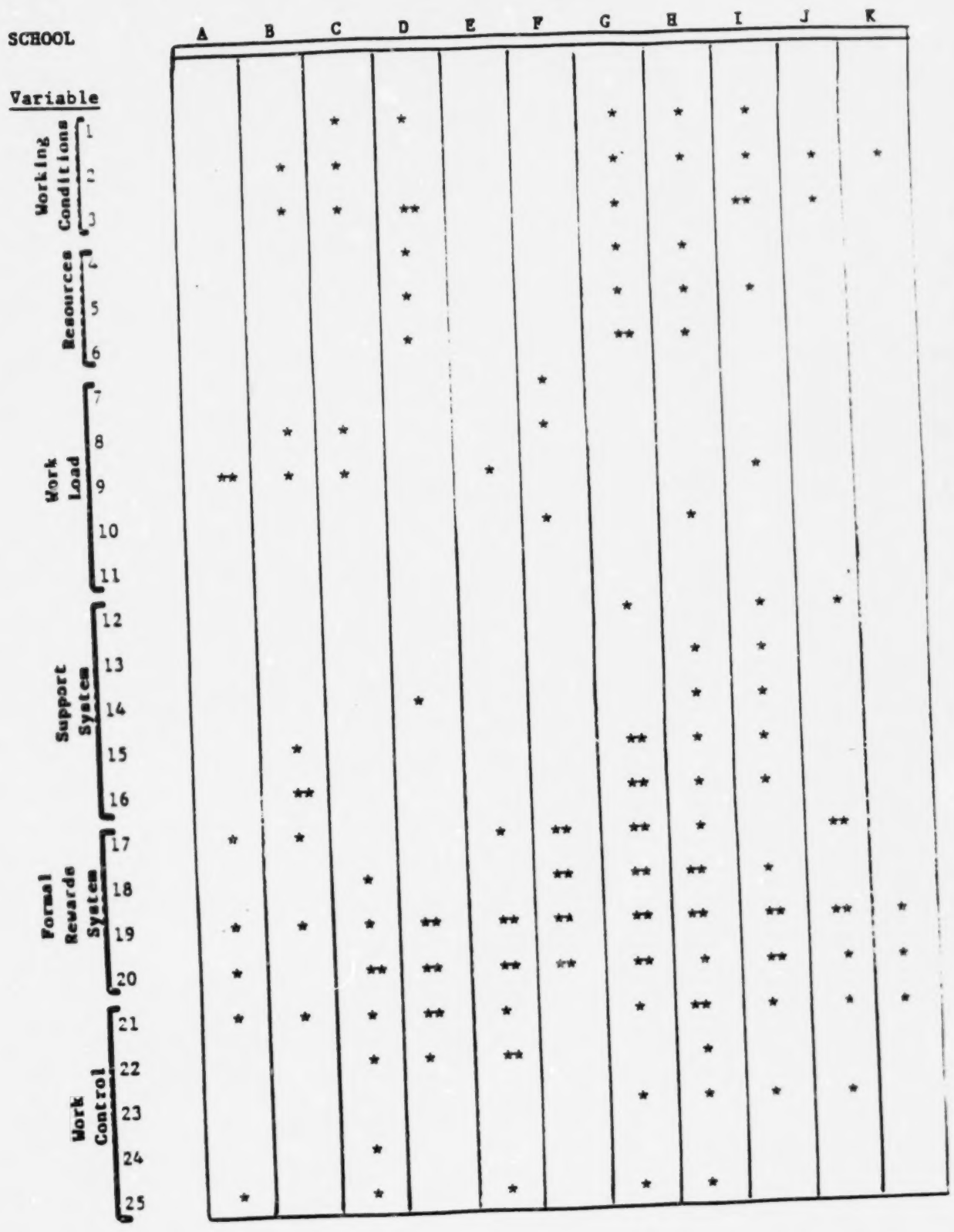
SCHOOL
A B C D E F G H I J K
Variable
Working Conditions
Resources
Work Load
Support System
Formal Rewards System
Work Control
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

Table 5 Continued

SCHOOL		A	B	C	D	E	F	G	H	I	J	K
Variable												
Inclusion	26							*		*		
	27			*	*	*		*	*	*		
	28						*					
	29											
	30											
	31				*				*	*		
Job Enrichment	32								*			
	33				*					*		
	34							*	*	*		
	35				*		*	*	*	*		
Sense of Achievement	36			*								
	37											
	38						*	*				
	39											
Recognition	40						*	*		*		
	41				**			*	*	*		*
	42									*		
	43		*				*	**	*	*		*
Growth	44											
	45		*	*	*	*	*	*	*	*		*
	46	*	*	*	**	**	**	**	*	**	*	*
Status	47				*		*	*	*	**	*	*
	48						*		*	*	*	
	49		**		*		*	**	*	**	*	*
	50				*		**	*	*	*	*	
Total		7	13	16	20	10	18	29	31	31	13	10

*Any workplace variable that is perceived as good or very good by fewer than 60% of the teachers

**Any workplace variable that is perceived as good or very good by fewer than 30% of the teachers at a given school

Table 4

AREAS OF HIGH SATISFACTION AND AREAS OF CONCERN
BY SCHOOL

Variable		A	B	C	D	E	F	G	H	I	J	K
Working Conditions	1			-	-		+	-		-		
	2		-	-			+	-	-	-	-	-
	3		-	-	-			-		-	-	
Resources	4				-		+	-				+
	5		-	-	-		+	-				+
	6			-	-			-	-			+
Work Load	7		-		+	+	-		+	+		
	8		-	-			-					
	9	-	-	-		-						
	10	+	-	+		+			+	+		
	11	+	+			+		+		+	+	
Support System	12				+	+		-		-	-	+
	13	+					+	+	-			
	14	+	+	-	-		+		-		+	
	15		-	+	+	+	+	-			+	+
	16	+	-	+	+	+	+	-				+
Formal Rewards System	17	-	-				-	-	-		-	
	18			-			-	-	-			
	19	-	-	-	-	-	-	-	-	-	-	-
	20	-	+	-	-	-	-	-			-	-
Work Control	21	-	-	-	-	-		-	-	-		-
	22		-	-	-	-		-	-			
	23	+							-	-	-	
	24			-			+					+
	25	-	+	-		-		-	-			+

Table 4 Continued

Variable		SCHOOL A	B	C	D	E	F	G	H	I	J	K
Inclusion	26	+	+						+		+	-
	27			-	-	-			-	-		
	28			+			-		+			
	29	+	+	+	+	+			+	+	+	
	30			+					+	+		
	31	+			-				-	-		
Job Enrichment	32	+										
	33	+			-		+					
	34		+				+					
	35	+	+					-			+	
Sense of Achievement	36	+	+	-				+			+	+
	37	+	+			+	+					+
	38	+	+	+	+	+	+		+	+	+	+
	39		+	+	+	+						
Recognition	40				+	+		-				
	41				-					-		-
	42		+						+			
	43		-				-	-				
Growth	44								-			
	45	+	+			-	-				+	
	46		+	-	-	-	-	-	+			
Status	47				-		-	-	-	-	-	-
	48						-			-		
	49		-				-	-	-	-	-	-
	50				-		-	-		-	-	
Total		+(16) -(6)	+(15) -(15)	+(8) -(17)	+(8) -(17)	+(11) -(9)	+(13) -(14)	+(3) -(23)	+(9) -(16)	+(6) -(14)	+(9) -(10)	+(12) -(7)

+=Areas of high satisfaction
-=Areas of concern